

## APPENDIX C

“The Hawaii Unified Watershed Assessment”  
(text and Category I watershed maps  
with priority watershed underlined)

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# **The Hawaii Unified Watershed Assessment**

**October 1, 1998**

**State of Hawaii, Department of Health  
Clean Water Branch  
Polluted Runoff Control Program**

**State of Hawaii, Department of Business,  
Economic Development, and Tourism,  
Office of Planning-Coastal Zone Management Program**

**U.S. Department of Agriculture  
Natural Resources Conservation Service**

## **Introduction**

On October 18, 1997, the 25th Anniversary of the 1972 Clean Water Act, the Honorable Albert Gore, Jr., Vice President of the United States directed the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) to work with other federal agencies, state agencies and the public to develop a Clean Water Action Plan (CWAP) that charts a course toward fulfilling the original goal of the Clean Water Act - "fishable and swimmable" waters for all Americans.

A key element in the CWAP is a new cooperative approach to watershed protection called the Unified Watershed Assessment (UWA), in which state, tribal, federal and local governments, and the public first identify the watersheds with the most critical water quality problems and then work together to focus resources and implement effective strategies to solve these problems. Based on the watershed restoration priority setting guidance outlined in the *Final Framework for Unified Watershed Assessment, Restoration Priorities, and Restoration Action Strategies* (U.S. EPA), Hawaii will submit a list of watershed restoration priorities to the U.S. EPA by October 1, 1998. In developing these priorities, the State has identified the highest priority watersheds requiring restoration to be addressed beginning in the 1999-2000 fiscal period; coordinated with existing restoration priorities, including those established under section 303(d) of the Clean Water Act; and developed a preliminary schedule for the restoration of these priority watersheds.

## **Unified Watershed Assessments Process**

The Unified Watershed Assessment process characterizes the conditions of waters and overall health of aquatic systems within watersheds, using the following general framework:

### **Category I -Watersheds in Need of Restoration.**

These watersheds do not currently meet, or face imminent threat of not meeting, clean water and other natural resource goals. Identification of watersheds in need of restoration

is especially important because the CWAP may target new federal funds to these Category I watersheds.

**Category II - Watersheds Needing Preventive Action to Sustain Water Quality.**

These watersheds meet clean water and other natural resource goals and standards and support healthy aquatic systems. All such watersheds need the continuing implementation of core clean water and natural resource programs to maintain water quality and conserve natural resources.

**Category III - Watersheds with Pristine/Sensitive Aquatic System Conditions on Lands Administered by Federal, State, or Tribal Governments.**

State/tribes work cooperatively with federal land managers to identify watersheds with exceptionally pristine water quality, other sensitive aquatic system conditions, and drinking water sources that are located on lands administered by federal, state or tribal governments. These areas include currently designated and potential candidate Wilderness Areas, Outstanding Natural Resource Waters, and Wild and Scenic Rivers.

**Category IV - Watersheds With Insufficient Data to Make an Assessment.** These watersheds lack significant information, critical data elements, or the data density needed to make a reasonable assessment at this time.

*To support the new and expanded efforts to restore and protect the nation's waters as proposed in the CWAP, the President's FY1999 budget proposes a Clean Water and Watershed Restoration Budget initiative. (Clean Water Action Plan, Overview, vii). Additional funding may come to the State as a result of this plan, and these funds will be targeted to the selected priority watersheds. At this time, however, it appears that the funding levels proposed under the President's budget initiative have been significantly reduced.*

**Hawaii's Unified Watershed Assessment Process**

After reviewing the CWAP and guidance document, the Hawaii Department of Health (DOH), USDA's Natural Resource Conservation Service (NRCS), and the Hawaii Coastal Zone Management Program (CZM) within the State Department of Business, Economic Development, and Tourism (DBEDT) decided to take an approach based on developing restoration priorities within the scope of *existing efforts* throughout the State. This is consistent with EPA's UWA guidance document. Because of uncertain funding; limited time in which to convene this effort; and limited resources available to dedicate to an unfunded assessment, we directed our efforts to assessing what we already have in place throughout the State. We were very concerned about the short timeframe to accomplish this assessment and facilitate public participation in the process. Furthermore, we were apprehensive about the possible restrictions this process will place on future funding, as funding is only available for those watersheds currently identified as in need of restoration.

Among the eight major islands of the Hawaiian archipelago, there are 551 watersheds (See Table 1). Each Island has been assigned an 8-digit Hydrological Unit Code by the USGS. The DOH, NRCS, and CZM Program decided that the 8-digit Hydrological Unit Code was not specific enough to be useful for our State. Nevertheless, we also agreed that categorizing 551 watersheds would be too time consuming for the UWA. Thus, we decided to use the State's eleven-digit Watershed Unit Code and prioritize watersheds by regions and mountain ranges (see Table 2). We also agreed to gather more participants to make an initial ranking of Category I watersheds. We wanted broader participation from other agencies and interest groups to assess existing efforts statewide. This approach has proven to work well for our needs.

We wanted to be responsive as a State and provide a thoughtful, realistic assessment of watersheds that could be restored, given existing efforts, community participation, and additional funding. At this time, it is not realistic to request additional time from over-burdened agencies and community members to complete the assessment for all watershed as requested. We will undertake the assessment of Categories II-IV watersheds at a time when the process becomes more clearly defined in order for us to begin reprioritizing our already limited resources.

With this in mind, DOH, NRCS and CZM Program held meetings with local agencies to survey environmental restoration activities already underway in watersheds throughout the State. On June 8, 1998, a meeting was convened at the DOH to introduce partner agencies to the UWA concept. At this initial meeting, the national guidance was discussed and agencies were asked to describe current projects that may fit within the framework. Representatives from the U.S. Geological Service (USGS), NRCS, DOH's Clean Water Branch, Environmental Planning Office and Polluted Runoff Control Program, Department of Land and Natural Resources (DLNR), CZM Program and EPA attended this initial meeting.

At this meeting DOH presented information on the Clean Water 303(d) List of Water Quality-Limited Segments for FY 98 & 99, and the process by which this list was developed. In developing the 303(d) list, the public was given the opportunity to nominate for consideration waters they believed were impaired. This waterbody assessment meets the Clean Water Act's requirement that states assess the conditions of its waterbodies and prepare a list of its most polluted waters. The DOH offered the 303(d) list as an initial prioritization effort for Category I watersheds.

Following the national UWA guidance, each participating agency was asked to provide similar information regarding on going environmental restoration activities in watersheds throughout Hawaii. The NRCS provided its Environmental Quality Incentives Program (EQIP) list for FY'98, which included: West Maui, Pelekane Bay, Upcountry Maui, Mo'omomi and Hamakua/Hilo/Ka'u. The USGS priority list included: Waialeke Stream, Manoa Stream, Kahana Stream and Punaluu Stream. The DLNR also provided its "hot spots" list, naming its priority areas of concern throughout the State.

Agencies discussed these and other efforts in areas around the State that could possibly meet the criteria of the UWA guidance. In order to make this assessment more oriented toward existing

efforts, we did not set our own specific criteria for nomination; rather we used a multi-voting system. Each attendee was encouraged to nominate watersheds. Then, each was discussed and prioritized, keeping in mind the UWA criteria and level of existing effort in the watershed. Through this process, a preliminary listing of watersheds was developed for broader consideration. Other discussion points included the need for public involvement/ participation and the need for a "landscape" approach to defining watershed districts (not just a single watershed but a watershed district that may encompass more than one watershed that all affects the same water quality limited segment). It was decided that another meeting would be called in July to continue this effort and to invite other agencies to participate.

On July 16th a second meeting was held at the DOH. Representatives from the CZM Program, DOH, NRCS, DLNR, State Department of Agriculture, Hawaii Association of Conservation Districts, National Marine Fisheries Service, U.S. Forestry Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and U.S. Army Corps of Engineers attended this meeting.

Participants reviewed a watershed listing in a matrix format (Attachment 1) compiled from DOH's 303(d) list, NRCS's EQUIP list, USGS's priority list and DLNR's "Hot Spots" as a starting point for prioritizing watershed districts. They discussed ongoing efforts and developed localized selection criteria. Again, each participant was encouraged to nominate watersheds, discuss existing efforts in the area and the amount of public support for the watershed. All nominated watersheds were discussed, and three were chosen by multi-voting/consensus.

The areas selected at this meeting were:

- West Maui and Mountains
- Pelekane Bay-Kohala Mountains
- Koolaupoko and Mountains

It was agreed that this list would be taken to the NRCS State Technical Committee for final review. The list would then be attached to a letter from Bruce Anderson, Deputy Director of DOH to EPA by August 1, 1998. The committee members, NRCS, CZM Program, and the State Technical Committee requested that this letter come from Dr. Anderson, after they reviewed and approved the final letter.

At the NRCS State Technical Committee meeting on July 27, 1998, the list was presented and criteria discussed with the membership. During this meeting, it was decided that the list include at least one watershed area on each of the five major islands in the State, at least one from each county. The Committee believed it was important to give residents of these islands an opportunity to receive additional funds to meet their watershed restoration goals. As a result, two additional watersheds were added: Nawiliwili (Kauai) and South Molokai.

**Public Notice**

A Public Notice was published in the Honolulu Advertiser on Wednesday August 19, 1998, requesting comments from the public (Attachment 2). The selected watersheds and criteria for selection, as developed by the participants, were included in the Public Notice:

**Criteria:**

- Agency interest/focus/existing work that promotes partnerships;
- Existing community interest;
- High probability of success and results transferable to similar areas within State;
- Historic and cultural significance;
- Presence of mixed land uses (agriculture, urban, residential, industrial, military);
- Presence of important natural resource;
- Presence of waterbodies on DOH's Section 303(d) list of Water Quality Limited Segments; and
- Watersheds capturing the "uniqueness" of Hawaii.

**List of Watersheds and reasons for selection:**

**-South Molokai (Molokai)** - Erosion control for water quality improvement, coral reef protection and historic/cultural preservation. High probability of success because of current projects and partnerships.

**-Pelekane Bay-Kohala Mountains (Hawaii)** - Erosion control and resource management for coral reef protection, enhanced recreational usage and historic/cultural preservation. Presence of important natural resources. High probability of success because of current projects and partnerships.

**-West Maui-West Maui Mountains (Maui)** - Reduce sediments and nutrients for water quality improvement, enhanced recreational usage along coastline and habitat improvement in a National Marine Sanctuary, and historic/cultural preservation. Presence of important natural resources. High probability of success because of current projects and partnerships.

**-Koolaupoko District-Windward Koolau Mountains (Oahu)** - Habitat restoration and protection, reduction of nonpoint source runoff for enhancement of recreational usage of streams and nearshore waters, and historic/cultural preservation. Mix of land uses. High probability of success because of current projects and partnerships.

**-Nawiliwili (Kauai)** - Identification and reduction of nonpoint source runoff to restore habitat and enhance recreation usage. Mix of land uses. Presence of important natural resources.

DOH issued a press release at the same time as the public notice. Public comments were accepted until September 16, 1998. Comments submitted (Attachment 3) were discussed with participating agencies and reviewed by DOH, NRCS and CZM Program on September 17, 1998. At this meeting, it was agreed that we did not have enough time to convene a meeting that would bring together the public and agencies to readdress the priority watersheds in Category I. Most of the comments were favorable of the process and only a few additional watersheds outside of the existing Category I listing were nominated. The remaining Category I watersheds not part of the above listed five "first tier" watershed areas are referred to as "second tier" Category I

watersheds. The "second tier" watersheds are all the remaining ones that have or drain into CWA 303(d) listed waterbodies, plus Kaho'olawe. Other nominated watersheds not on the CWA 303(d) list (Waialua-Kauai, East Maui, East Molokai, Kohala and West Hawaii) will be put into appropriate categories and addressed accordingly at a later time.

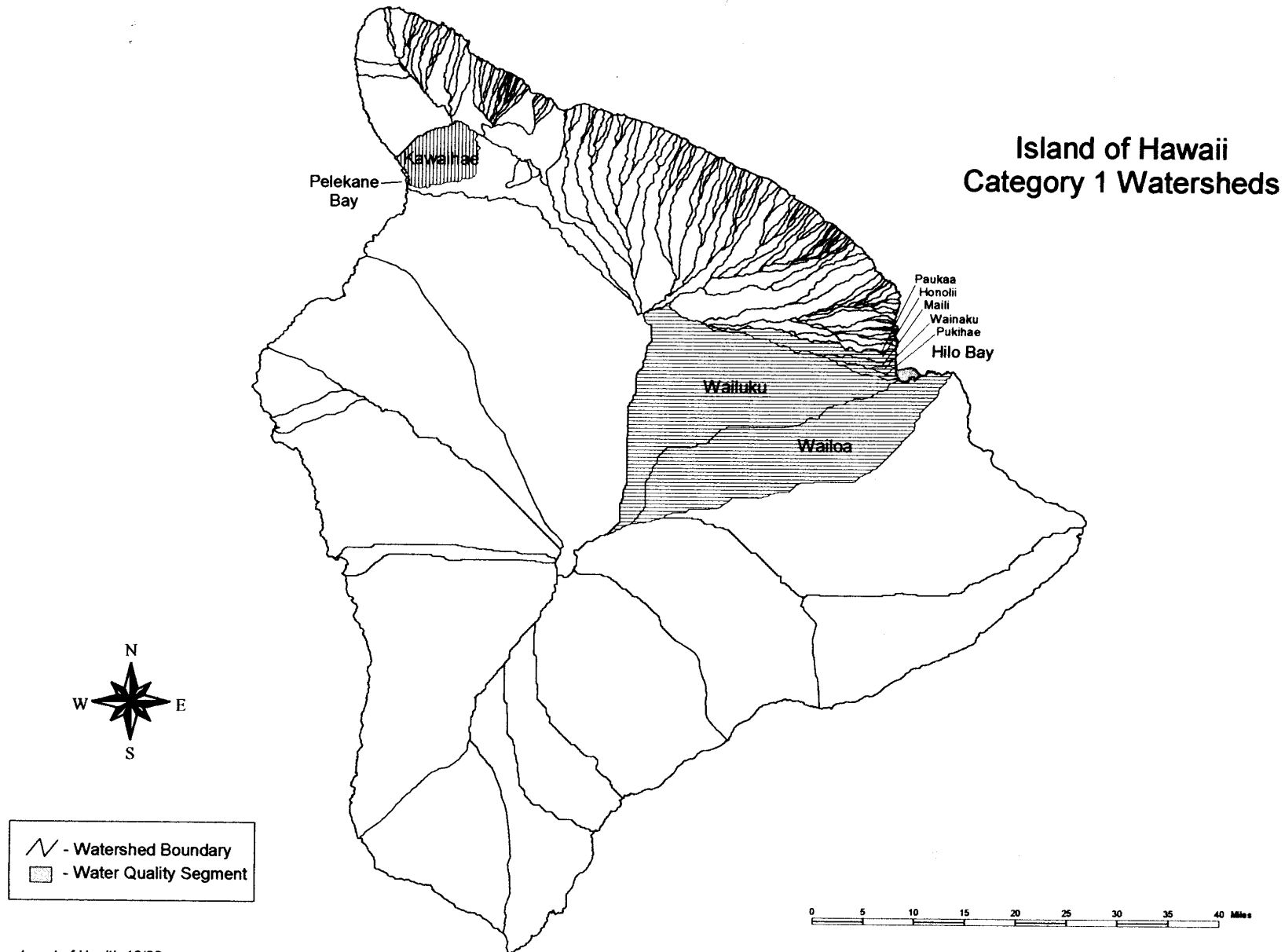
The State recognizes that Kaho'olawe is currently receiving substantial funds from the U.S. Navy for restoration activities. The Kaho'olawe Island Reserve Commission, who oversees this restoration, has volunteered to share information regarding their efforts and successes with other watersheds groups. Based on the fact that a great amount of restoration work is underway and that there is a significant need for habitat and coastal water quality restoration, Kaho'olawe has been included as a Category I watershed.

**Results** Hawaii's assessment consists of maps of each major island's watersheds and a list of all watersheds (Table 1) within State boundaries, aggregated into 11 -digit hydrologic units. The priority watersheds nominated for Category I are delineated on the maps and Table 2. All remaining Category I watersheds (second tier) are delineated on maps and Table 3.

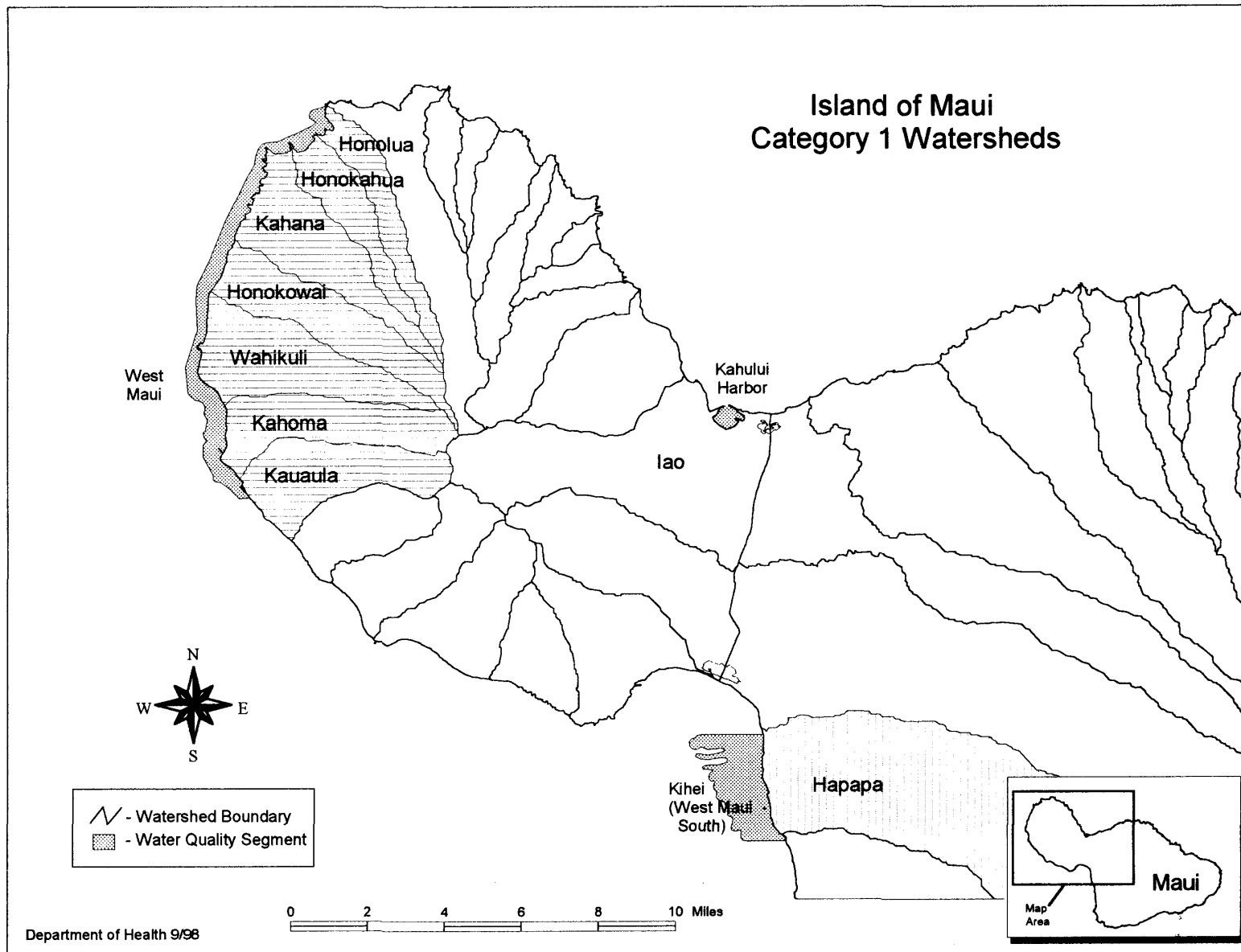
### **Watershed Restoration Action Strategy**

The next step, is for Hawaii to convene a joint agency/public committee to discuss the direction and approach that Hawaii will take in developing restoration strategies and watershed plans for the five priority watersheds. If funding is obtained, implementation of the watershed plans will begin. We will make every effort to complete the ranking of the additional watersheds throughout the State with the guidance and assistance of this committee. Funding is an important component in continuing the CWAP process.

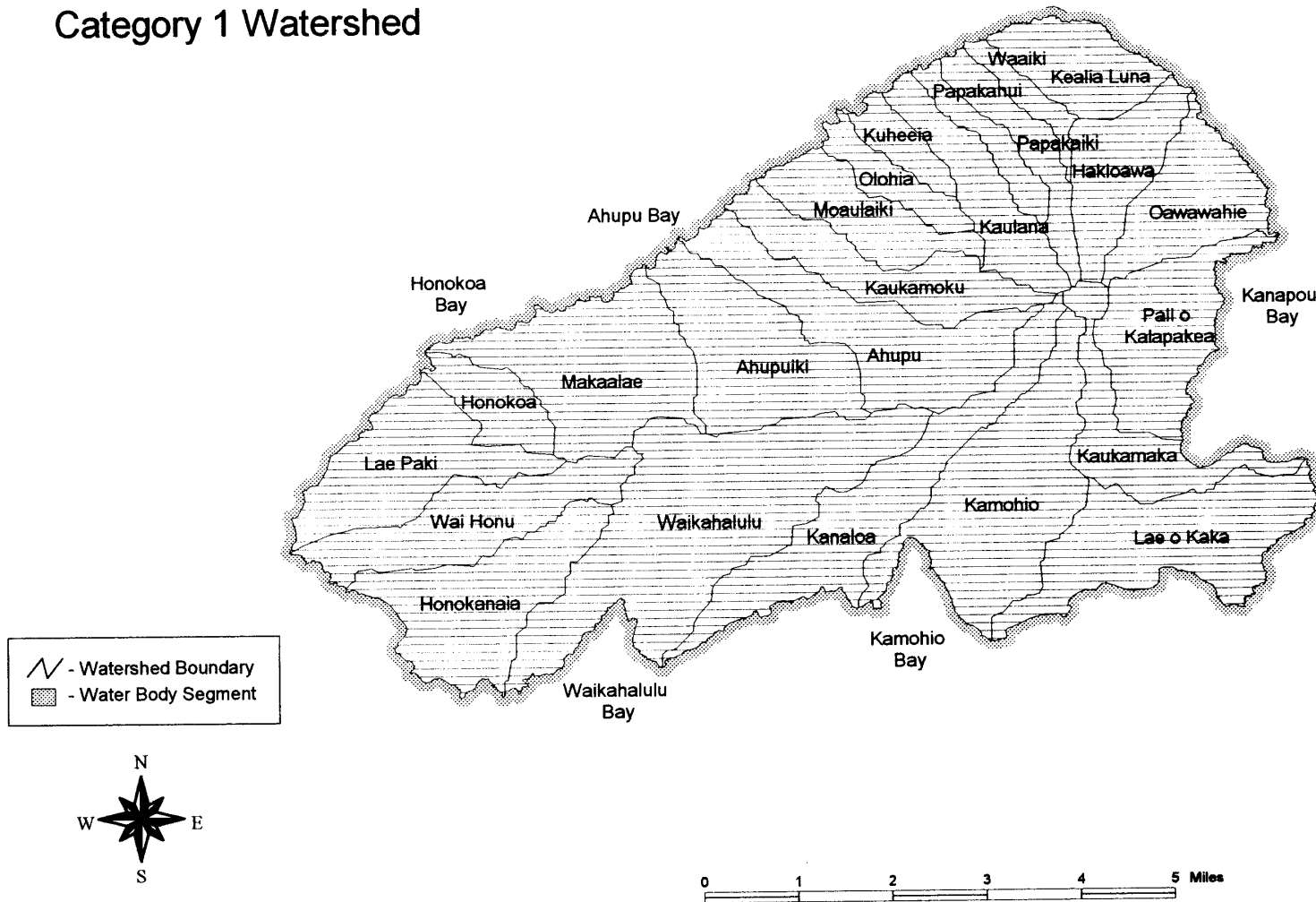




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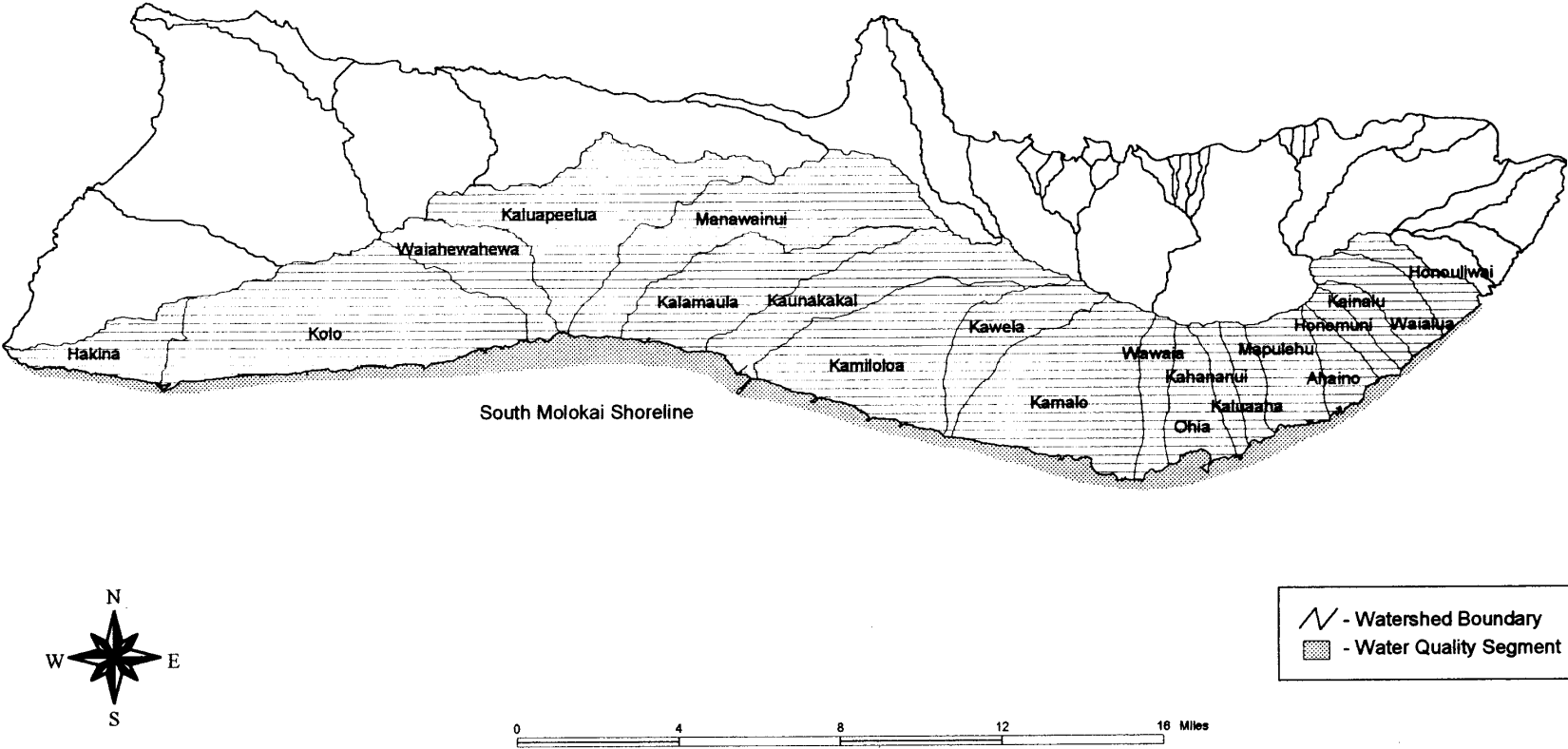


## Island of Kahoolawe Category 1 Watershed



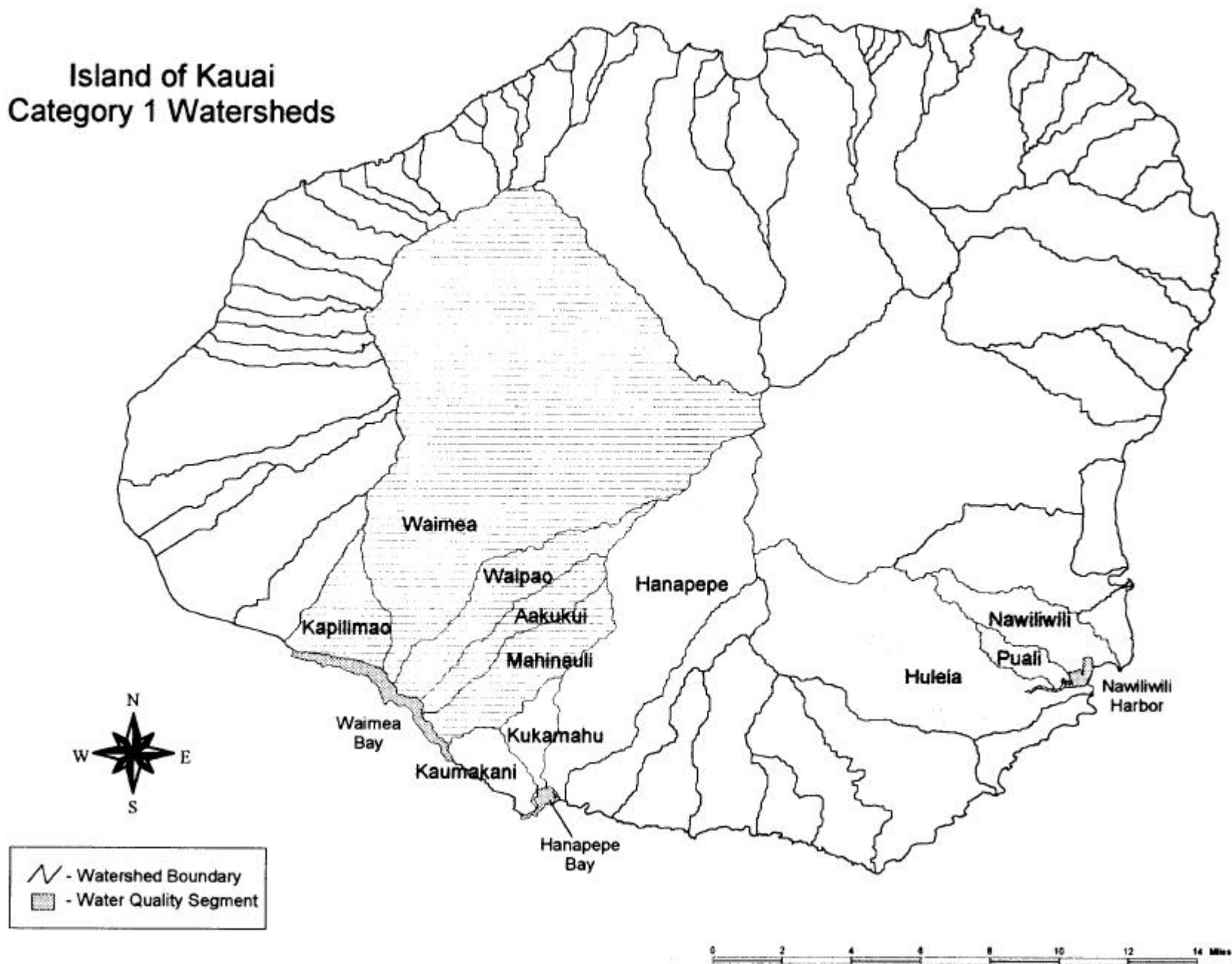
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Island of Molokai  
Category 1 Watersheds





## Island of Kauai Category 1 Watersheds





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